



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

004279

D412-698-042
Job Sheet 179702



Part No: D412-698-042

Job Qty: 1 ea

Part Name: Hinge Panel Automatic Door Opener RH OEM Aluminum Door



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 6/21/18

Job Tracking No:

Due Date: 7/13/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: IIN-D412-698 REV.G IPP REV:A 11.08.18 new issue DD verf:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	7/13/18	7/13/18	0.00	0.00	Start Up Stores/Pkg-2		JUL 09 2018
110	Packaging	1 pcs	7/13/18	7/13/18	0.00	0.00	Packaging1-4		JUL 09 2018
120	QC	1 pcs	7/13/18	7/13/18	0.00	0.00	QC4		JUL 09 2018
130	Packaging	1 pcs	7/13/18	7/13/18	0.00	0.00	Packaging3-2		JUL 09 2018
135	DC	1 pcs	7/13/18	7/13/18	0.00	0.00	DC		JUL 09 2018
140	QC21-FG	1 Ea	7/13/18	7/13/18	0.00	0.00	QC21		JUL 09 2018

Part Op 135 - Photocopy bluefile and create labels per PPP D412-698-042 CHG001
Descriptions:

JUL 11 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D3552-21	Door Prop	1 Ea (1 ea)	90-Start up Operation	5073169
D3622-1	Ball Stud	1 Ea (1 ea)	90-Start up Operation	3081667
D4330-042	Airframe Bracket Assembly, RH	1 Ea (1 ea)	90-Start up Operation	7147391
D4330-3	Door Bracket	1 Ea (1 ea)	90-Start up Operation	5083567
MS21042L5	Nut	1 Ea (1 ea)	90-Start up Operation	5058178
NAS1149D0563J	Washer	1 Ea (1 ea)	90-Start up Operation	5068662

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D3552-21	1	7	0
	D3622-1	1	40	0
	D4330-042	1	1	0
	D4330-3	1	0	0
	MS21042L5	1	558	0
	NAS1149D0563J	1	1,919	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____ Date : _____	DISPOSITION Rework ☐	VT/PROCESS <table style="width:100%;"> <tr> <td style="width:50%;">Water Jet ☐</td> <td style="width:50%;">Engineering ☐</td> </tr> <tr> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Re/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Supplier ☐</td> <td></td> </tr> </table>	Water Jet ☐	Engineering ☐	Prod. Eng. Coord. ☐	Quality ☐	Re/Packaging ☐	Other ☐	Supplier ☐																																																																																																												
Water Jet ☐	Engineering ☐																																																																																																																				
Prod. Eng. Coord. ☐	Quality ☐																																																																																																																				
Re/Packaging ☐	Other ☐																																																																																																																				
Supplier ☐																																																																																																																					
Description Container No: S090167 Part: D412 - 698 - 042 Job No: 179702 Serial No/Batch: S090167 Revision: G Inspector: Exp Date: Instructions:		MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																																																																			
<table style="width:100%;"> <tr> <td style="width:33%; vertical-align: top;"> Root Cause <table style="width:100%;"> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td></tr> </table> </td> <td style="width:33%; vertical-align: top;"> <table style="width:100%;"> <tr><td>☐</td><td>Centre Not Concentric</td></tr> <tr><td>☐</td><td>Cracks</td></tr> <tr><td>☐</td><td>Crimp/Kink/Ripple/Wave</td></tr> <tr><td>☐</td><td>Cuffs</td></tr> <tr><td>☐</td><td>Crushing</td></tr> <tr><td>☐</td><td>Heat Treat</td></tr> <tr><td>☐</td><td>Wave/Twist in Tube</td></tr> <tr><td>☐</td><td>Marks/Chatter</td></tr> </table> </td> <td style="width:33%; vertical-align: top;"> FAULT CATEGORY <table style="width:100%;"> <tr><td>☐</td><td>Temperature/Cure</td><td>☐</td><td>Power Loss/Surge</td><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Set-up</td><td>☐</td><td>Folio/Program</td><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>BOM/Route</td><td>☐</td><td>Grain</td><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Broken/Damage/Defect</td><td>☐</td><td>Weld</td><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td>Inspection Incomplete/Unqualified</td><td>☐</td><td>Wrong Stock Pulled</td><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td>Contamination</td><td>☐</td><td>Out of Sequence</td><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td>Countersink</td><td>☐</td><td>Off-set</td><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td>Cut Too Short</td><td>☐</td><td>Mislabeled</td><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td>Instructions Incomplete/Unclear</td><td>☐</td><td>Fit/Function</td><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td>Drill Holes</td><td>☐</td><td>Misaligned/off center</td><td>☐</td><td>Turning Sequence</td></tr> </table> </td> </tr> </table>			Root Cause <table style="width:100%;"> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td></tr> </table>	Environment	☐	No Re-verification	Design	☐	Operator	Doc/Data	☐	Offset/Setup	Equip/Tooling	☐	Supplier	Handling/Pre	☐	Training	Material	☐	Use for Testing	Internal Transport	☐	Poor Information	Tribal Knowledge	☐	Rushing	LOA	☐	Product Improvement	Substation	☐	Process Improvement	Past Expiry Date	☐	Manufacturing Process	Misidentified	☐	Past Due	<table style="width:100%;"> <tr><td>☐</td><td>Centre Not Concentric</td></tr> <tr><td>☐</td><td>Cracks</td></tr> <tr><td>☐</td><td>Crimp/Kink/Ripple/Wave</td></tr> <tr><td>☐</td><td>Cuffs</td></tr> <tr><td>☐</td><td>Crushing</td></tr> <tr><td>☐</td><td>Heat Treat</td></tr> <tr><td>☐</td><td>Wave/Twist in Tube</td></tr> <tr><td>☐</td><td>Marks/Chatter</td></tr> </table>	☐	Centre Not Concentric	☐	Cracks	☐	Crimp/Kink/Ripple/Wave	☐	Cuffs	☐	Crushing	☐	Heat Treat	☐	Wave/Twist in Tube	☐	Marks/Chatter	FAULT CATEGORY <table style="width:100%;"> <tr><td>☐</td><td>Temperature/Cure</td><td>☐</td><td>Power Loss/Surge</td><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Set-up</td><td>☐</td><td>Folio/Program</td><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>BOM/Route</td><td>☐</td><td>Grain</td><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Broken/Damage/Defect</td><td>☐</td><td>Weld</td><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td>Inspection Incomplete/Unqualified</td><td>☐</td><td>Wrong Stock Pulled</td><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td>Contamination</td><td>☐</td><td>Out of Sequence</td><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td>Countersink</td><td>☐</td><td>Off-set</td><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td>Cut Too Short</td><td>☐</td><td>Mislabeled</td><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td>Instructions Incomplete/Unclear</td><td>☐</td><td>Fit/Function</td><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td>Drill Holes</td><td>☐</td><td>Misaligned/off center</td><td>☐</td><td>Turning Sequence</td></tr> </table>	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐	Countersink	☐	Off-set	☐	Drawing	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Root Cause <table style="width:100%;"> <tr><td>Environment</td><td>☐</td><td>No Re-verification</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td></tr> </table>	Environment	☐	No Re-verification	Design	☐	Operator	Doc/Data	☐	Offset/Setup	Equip/Tooling	☐	Supplier	Handling/Pre	☐	Training	Material	☐	Use for Testing	Internal Transport	☐	Poor Information	Tribal Knowledge	☐	Rushing	LOA	☐	Product Improvement	Substation	☐	Process Improvement	Past Expiry Date	☐	Manufacturing Process	Misidentified	☐	Past Due	<table style="width:100%;"> <tr><td>☐</td><td>Centre Not Concentric</td></tr> <tr><td>☐</td><td>Cracks</td></tr> <tr><td>☐</td><td>Crimp/Kink/Ripple/Wave</td></tr> <tr><td>☐</td><td>Cuffs</td></tr> <tr><td>☐</td><td>Crushing</td></tr> <tr><td>☐</td><td>Heat Treat</td></tr> <tr><td>☐</td><td>Wave/Twist in Tube</td></tr> <tr><td>☐</td><td>Marks/Chatter</td></tr> </table>	☐	Centre Not Concentric	☐	Cracks	☐	Crimp/Kink/Ripple/Wave	☐	Cuffs	☐	Crushing	☐	Heat Treat	☐	Wave/Twist in Tube	☐	Marks/Chatter	FAULT CATEGORY <table style="width:100%;"> <tr><td>☐</td><td>Temperature/Cure</td><td>☐</td><td>Power Loss/Surge</td><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Set-up</td><td>☐</td><td>Folio/Program</td><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>BOM/Route</td><td>☐</td><td>Grain</td><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Broken/Damage/Defect</td><td>☐</td><td>Weld</td><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td>Inspection Incomplete/Unqualified</td><td>☐</td><td>Wrong Stock Pulled</td><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td>Contamination</td><td>☐</td><td>Out of Sequence</td><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td>Countersink</td><td>☐</td><td>Off-set</td><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td>Cut Too Short</td><td>☐</td><td>Mislabeled</td><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td>Instructions Incomplete/Unclear</td><td>☐</td><td>Fit/Function</td><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td>Drill Holes</td><td>☐</td><td>Misaligned/off center</td><td>☐</td><td>Turning Sequence</td></tr> </table>	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐	Countersink	☐	Off-set	☐	Drawing	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence			
Environment	☐	No Re-verification																																																																																																																			
Design	☐	Operator																																																																																																																			
Doc/Data	☐	Offset/Setup																																																																																																																			
Equip/Tooling	☐	Supplier																																																																																																																			
Handling/Pre	☐	Training																																																																																																																			
Material	☐	Use for Testing																																																																																																																			
Internal Transport	☐	Poor Information																																																																																																																			
Tribal Knowledge	☐	Rushing																																																																																																																			
LOA	☐	Product Improvement																																																																																																																			
Substation	☐	Process Improvement																																																																																																																			
Past Expiry Date	☐	Manufacturing Process																																																																																																																			
Misidentified	☐	Past Due																																																																																																																			
☐	Centre Not Concentric																																																																																																																				
☐	Cracks																																																																																																																				
☐	Crimp/Kink/Ripple/Wave																																																																																																																				
☐	Cuffs																																																																																																																				
☐	Crushing																																																																																																																				
☐	Heat Treat																																																																																																																				
☐	Wave/Twist in Tube																																																																																																																				
☐	Marks/Chatter																																																																																																																				
☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong																																																																																																																
☐	Set-up	☐	Folio/Program	☐	Outside Dimensions																																																																																																																
☐	BOM/Route	☐	Grain	☐	Over/Under tolerance																																																																																																																
☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect																																																																																																																
☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing																																																																																																																
☐	Contamination	☐	Out of Sequence	☐	Part Moved																																																																																																																
☐	Countersink	☐	Off-set	☐	Drawing																																																																																																																
☐	Cut Too Short	☐	Mislabeled	☐	Finish																																																																																																																
☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread																																																																																																																
☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence																																																																																																																
OTHER : _____																																																																																																																					

9.0 PARTS LIST – HINGE PANEL AUTOMATIC DOOR OPENER KITS

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D412-698-041	HINGE PANEL AUTOMATIC DOOR OPENER KIT, LH (FOR OEM ALUMINUM DOORS)
	X			D412-698-042	HINGE PANEL AUTOMATIC DOOR OPENER KIT, RH (FOR OEM ALUMINUM DOORS)
		X		D412-698-043	HINGE PANEL AUTOMATIC DOOR OPENER KIT, LH (FOR OEM COMPOSITE AND DART SPACEDOORS™ DOORS)
			X	D412-698-044	HINGE PANEL AUTOMATIC DOOR OPENER KIT, RH (FOR OEM COMPOSITE AND DART SPACEDOORS™ DOORS)
1	1	1	1	D3552-21	GAS SPING
1	1	1	1	D3622-1	BALL STUD
1		1		D4330-041	AIRFRAME BRACKET ASSEMBLY, LH
	1		1	D4330-042	AIRFRAME BRACKET ASSEMBLY, RH
1	1	1	1	D4330-3	DOOR BRACKET
		3	3	80-005-2-8	INSERT
1	1	1	1	MS21042L5	NUT
		3	3	MS27039-1-05	SCREW
		3	3	NAS1149D0332J	WASHER
1	1	1	1	NAS1149D0563J	WASHER

REFERENCE ONLY